Reducing Nitrogen Content in Silicon Carbide Crystals by Sublimation Growth in a Hydrogen-Containing Ambient

ABSTRACT OF THE INVENTION

The invention herein relates to controlling the nitrogen content in silicon carbide crystals and in particular relates to reducing the incorporation of nitrogen during sublimation growth of silicon carbide. The invention controls nitrogen concentration in a growing silicon carbide crystal by providing an ambient atmosphere of hydrogen in the growth chamber. The hydrogen atoms, in effect, block, reduce, or otherwise hinder the incorporation of nitrogen atoms at the surface of the growing crystal.

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